

USSN 09/577,468  
Supplemental Amendment  
24 February 2004

**Amendment to the Specification:**

Please replace the paragraph at page 3, line 23 to page 4, line 14 with the following amended paragraph::

The CNTF receptor complex contains three proteins: a specificity determining  $\alpha$  component that directly binds to CNTF, as well as two signal transducing  $\beta$  components (LIFR $\beta$  and gp130) that cannot bind CNTF on their own, but are required to initiate signaling in response to CNTF. The  $\beta$  component of the CNTFR complex is more widely distributed throughout the body than the  $\alpha$  component. The 3 components of the CNTFR complex are normally unassociated on the cell surface; 0CNTF induces the stepwise assembly of a complete receptor complex by first binding to CNTFR  $\alpha$ , then engaging gp130, and finally recruiting LIFR $\beta$ . When this final step in receptor assembly occurs (heterodimerization of the  $\beta$  components), intracellular signaling is initiated by activating non-receptor tyrosine kinases (JAK kinases) associated with the  $\beta$  components. JAK kinases respond by phosphorylating each other and also tyrosine residues on the receptor cytoplasmic domains, creating phosphotyrosine docking sites for the Src homology 2 domains of STAT proteins. After their phosphorylation, bound STAT proteins dissociate from the receptor, dimerize, and translocate to the nucleus where they bind DNA and activate transcription (reviews: Frank, D. and Greenberg, M. (1996) Perspectives on Developmental Neurobiology 4: 3-18; Stahl, N. and Yancopoulos, G. (1997) Growth factors and cytokines in health and disease 2B, 777-809). Axokine™ (rHCNTE, C17A, Q63RAC15) ("Ax-15") is a mutant CNTF molecule with improved physical and chemical properties, which retains the ability to interact with and activate the CNTF receptor. (Panayotatos, N., et al. (1993) J. Biol. Chem. 268: 19000-19003).

Please replace the paragraph at page 5, lines 28-31 with the following amended paragraph::

Figure 3 - Effects of Axokine[-15]™ (rHCNTE, C17A, Q63RAC15) (AX-15) in normal mice. Normal C57BL/6J mice were injected subcutaneously daily for 6 days with either vehicle or AX-15 at 0.1 mg/kg, 0.3 mg/kg, or 1.0 mg/kg. Percent change in body weight in AX-15-treated versus vehicle-treated controls is shown.